



SAFETY HEALTH AND
ENVIRONMENTAL AFFAIRS

JAN 6 1993

ORIGINAL

MATERIAL SAFETY DATA SHEET

PRODUCT

NALCLEAR 7768 FLOCCULANT

Emergency Telephone Number

Medical (708) 920-1510 (24 hours)

SECTION 1 PRODUCT IDENTIFICATION

TRADE NAME: NALCLEAR 7768 FLOCCULANT

DESCRIPTION: An acrylamide/acrylate polymer with a hydrocarbon solvent and water

NFPA 704M/HMIS RATING: 1/2 HEALTH 1/1 FLAMMABILITY 0/0 REACTIVITY 0 OTHER
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

SECTION 2 HAZARDOUS INGREDIENTS

Our hazard evaluation has identified the following chemical ingredients as hazardous under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 14 for the nature of the hazard(s).

INGREDIENT(S)	CAS #	APPROX. %
Ethoxylated octyl phenol	9036-19-5	1-5
Hydrotreated light distillate	64742-47-8	20-40

SECTION 3 PRECAUTIONARY LABEL INFORMATION

CAUTION: May cause irritation to skin and eyes. Avoid contact with skin, eyes and clothing. Do not take internally.

Empty containers may contain residual product. Do not reuse container unless properly reconditioned.

SECTION 4 FIRST AID INFORMATION

EYES:	Flush with water for 15 minutes. Call a physician.
SKIN:	Wash thoroughly with soap and rinse with water. Call a physician.
INGESTION:	Do not induce vomiting. Give water. Call a physician.
INHALATION:	Remove to fresh air. Treat symptoms. Call a physician.

NOTE TO PHYSICIAN: Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

SECTION 5 HEALTH EFFECTS INFORMATION

PRIMARY ROUTE(S) OF EXPOSURE: Eye, Skin



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SECTION 5 HEALTH EFFECTS INFORMATION

(CONTINUED)

EYE CONTACT: Can cause moderate irritation.

SKIN CONTACT: Can cause moderate irritation.

SYMPTOMS OF EXPOSURE: A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS: A review of available data does not identify any worsening of existing conditions.

SECTION 6 TOXICOLOGY INFORMATION

TOXICITY STUDIES: Toxicity studies have not been conducted on this product, but toxicity studies of the ingredient(s) in Section 2 have been reviewed. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS):

Ethoxylated octylphenol LD₅₀ = 2,000 mg/kg

Hydrotreated light distillate LD₅₀ = 40,000 mg/kg

ACUTE DERMAL TOXICITY (ALBINO RABBITS):

Ethoxylated octylphenol LD₅₀ = Greater than 3,000 mg/kg

Hydrotreated light distillate LD₅₀ = 2,000 - 4,000 mg/kg

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS):

SKIN IRRITATION INDEX DRAIZE RATING:

3.8/8.0 Ethoxylated octylphenol

5.2/8.0 Hydrotreated light distillate

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS):

EYE IRRITATION INDEX DRAIZE RATING:

49/110.0 Ethoxylated octylphenol

5/110.0 Hydrotreated light distillate

SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Clear to opaque off-white FORM: Liquid ODOR: Slight hydrocarbon

DENSITY: 8.5-9.0 lbs/gal.

SOLUBILITY IN WATER: Completely

SPECIFIC GRAVITY: 1.04

ASTM D-1298

pH (at 1%) = 6.8

ASTM E-70

VISCOSITY: 300-1,700 cps @ 77 Degrees F

ASTM D-2983

FREEZE POINT: 26 Degrees F

ASTM D-1177

BOILING POINT: 215 Degrees F @ 760 mm Hg

ASTM D-86

FLASH POINT: Greater than 200 Degrees F (PMCC)

ASTM D-93



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SECTION 7 PHYSICAL AND CHEMICAL PROPERTIES

(CONTINUED)

NOTE: These physical properties are typical values for this product.

SECTION 8 FIRE AND EXPLOSION INFORMATION

FLASH POINT: Greater than 200 Degrees F (PMCC) ASTM D-93

EXTINGUISHING MEDIA: This product would not be expected to burn unless all the water is boiled away. The remaining organics may be ignitable. Use water to cool containers exposed to fire.

UNUSUAL FIRE AND EXPLOSION HAZARD: May evolve NO_x under fire conditions.

SECTION 9 REACTIVITY INFORMATION

INCOMPATIBILITY: Avoid water contamination which may cause gelling.

Avoid contact with strong oxidizers (eg. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions and the release of toxic fumes.

THERMAL DECOMPOSITION PRODUCTS: In the event of combustion CO, CO₂, NO_x may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 10 PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION: Respiratory protection is not normally needed.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilation, a pressure-demand, self-contained breathing apparatus is recommended.

VENTILATION: General ventilation is recommended.

PROTECTIVE EQUIPMENT: Use impermeable gloves and chemical splash goggles when attaching feeding equipment, doing maintenance or handling product. Examples of impermeable gloves available on the market are neoprene, nitrile, PVC, natural rubber, viton and butyl (compatibility studies have not been performed).

The availability of an eye wash fountain and safety shower is recommended.

If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.



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SECTION 11 SPILL AND DISPOSAL INFORMATION

IN CASE OF TRANSPORTATION ACCIDENTS, CALL THE FOLLOWING 24-HOUR TELEPHONE NUMBER (708-920-1510)

SPILL CONTROL AND RECOVERY:

Small liquid spills: Contain with absorbent material, such as clay, soil or any commercially available absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section 14.

Large liquid spills: Dike to prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section 14.

For large indoor spills, evacuate employees and ventilate area. Those responsible for control and recovery should wear the protective equipment specified in Section 10.

DISPOSAL: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

As a non-hazardous liquid waste, it should be solidified with stabilizing agents (such as sand, fly ash, or cement) so that no free liquid remains before disposal to an industrial waste landfill. A non-hazardous liquid waste can also be incinerated in accordance with local, state, and federal regulations.

SECTION 12 ENVIRONMENTAL INFORMATION

AQUATIC DATA: Results below based on the product.

96 hour static acute LC₅₀ to Fathead Minnow = 240 mg/L

96 hour no observed effect concentration is 180 mg/L based on no mortality or abnormal effects.

TOXICITY RATING: Slightly toxic

48 hour static acute LC₅₀ to Daphnia Magna = 0.12 mg/L

48 hour no observed effect concentration is 0.065 mg/L based on no mortality or abnormal effects.



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SECTION 12 ENVIRONMENTAL INFORMATION

(CONTINUED)

TOXICITY RATING: Extremely toxic

96 hour static acute LC_{50} to Mysid Shrimp (*mysis litoralis*) = 188.9 mg/L

TOXICITY: Slightly toxic

AQUATIC DATA: Results below based on a 1% aqueous solution of a product.

96 hour static acute LC_{50} to Rainbow Trout = Greater than 1,000 mg/L

96 hour no observed effect concentration is 125 mg/L based on no mortality or abnormal effects.

TOXICITY RATING: Essentially non-toxic

96 hour static acute LC_{50} to Sheepshead Minnow = Greater than 1,000 mg/L

96 hour no observed effect concentration is 1,000 mg/L (highest concentration tested) based on no mortality or abnormal effects.

TOXICITY RATING: Essentially non-toxic

96 hour static acute LC_{50} to Mysid Shrimp (*mysidopsis bahia*) = 400 mg/L

96 hour no observed effect concentration is 180 mg/L based on no mortality or abnormal effects.

TOXICITY: Slightly toxic

48 hour static acute LC_{50} to *Daphnia magna* = 280 mg/L

48 hour no observed effect concentration is less than 56 mg/L (lowest concentration tested) based on no mortality or abnormal effects.

TOXICITY RATING: Slightly toxic

If released into the environment, see CERCLA in Section 14.

SECTION 13 TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME/HAZARD CODE - PRODUCT IS NOT REGULATED
DURING TRANSPORTATION



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SECTION 14 REGULATORY INFORMATION

The following regulations apply to this product.

FEDERAL REGULATIONS:

OSHA'S HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

Based on our hazard evaluation, the following ingredients in this product are hazardous and the reasons are shown below.

Ethoxylated octylphenol - Moderate eye irritant
Hydrotreated light distillate - Skin irritant

Hydrotreated light distillate (oil mist) = TWA 5 mg/m³ ACGIH/TLV

CERCLA, 40 CFR 117, 302:

Notification of spills of this product is not required.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986
(TITLE III) - SECTIONS 302, 311, 312 AND 313:

SECTION 302 - EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

SECTIONS 311 and 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):
Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

XX Immediate (acute) health hazard
-- Delayed (chronic) health hazard
-- Fire hazard
-- Sudden release of pressure hazard
-- Reactive hazard

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):

This product does not contain ingredients on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

The chemical ingredients in this product are on the 8(b) Inventory List (40 CFR 710).

FOOD AND DRUG ADMINISTRATION (FDA):

Federal Food, Drug and Cosmetic Act:

When use situations necessitate compliance with FDA regulations, this product is acceptable under 21 CFR 173.5 for use in the clarification



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SECTION 14 REGULATORY INFORMATION

(CONTINUED)

of beet sugar juice and liquor or cane sugar juice and liquor.
The following use limitations apply: Dosages do not exceed 14 ppm based on the weight of the thin juice or 28 ppm based on the weight of the liquor. Sugar juice contains 15% or less of sugar, and liquor contains greater than 15% sugar.

U. S. EPA - OFFICE OF DRINKING WATER - ADDITIVES EVALUATION BRANCH:
The USEPA has approved this product for use as a coagulation aid in the treatment of potable water. The maximum recommended product dosage limit is 1.0 mg/l.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA), 40 CFR 261 SUBPART C & D:
Consult Section 11 for RCRA classification.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15
(formerly Sec. 307), 40 CFR 116 (formerly Sec. 311):
None of the ingredients are specifically listed.

Clean Air Act, Sec. 111 (40 CFR 60), Sec. 112 (40 CFR 61, 1990 Amendments):
This product does not contain ingredients covered by the Clean Air Act.

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

This product does not contain any chemicals which require warning under California Proposition 65.

MICHIGAN CRITICAL MATERIALS:

This product does not contain ingredients listed on the Michigan Critical Materials Register.

STATE RIGHT TO KNOW LAWS:

This product does not contain ingredients listed by State Right To Know Laws.

INTERNATIONAL REGULATIONS:

This is a WHMIS controlled product under The House of Commons of Canada Bill C-70. The product contains the following substance(s), from the Ingredient Disclosure List or has been evaluated based on its toxicological properties, to contain the following hazardous ingredient(s):

Chemical Name	CAS #	% Concentration Range
Ethoxylated octylphenol	9036-19-5	1-5



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SECTION 14 REGULATORY INFORMATION

(CONTINUED)

Hydrotreated light distillate 64742-47-8 20-40

SECTION 15 ADDITIONAL INFORMATION

None

SECTION 16 USER'S RESPONSIBILITY

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.

SECTION 17 BIBLIOGRAPHY

ANNUAL REPORT ON CARCINOGENS, U.S. Department of Health and Human Services, Public Health Service, PB 33-135855, 1983.

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SECTION 17 BIBLIOGRAPHY

(CONTINUED)

Title 29 Code of Federal Regulations Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA).

THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS IN THE WORKROOM ENVIRONMENT WITH INTENDED CHANGES, American Conference of Governmental Industrial Hygienists, OH.

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